**Before the**
**Federal Communications Commission**
**Washington, D.C. 20554**

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| In the Matter of | ) | |
| | ) | |
| Flexibility for Delivery of | ) | IB Docket No. 01-185 |
| Communications by Mobile Satellite | ) | |
| Service Providers in the 2 GHz Band, | ) | |
| L-Band, and the 1.6/2.4 GHz Band | ) | |
| | ) | |
| Amendment of Section 2.106 of the | ) | ET Docket No. 95-18 |
| Commission's Rules to Allocate | ) | |
| Spectrum at 2 GHz for Use by the | ) | |
| Mobile Satellite Service | ) | |

# COMMENTS OF THE MOBILE SATELLITE USERS ASSOCIATION


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October 22, 2001

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Reference: Notice of Proposed Rulemaking in IB Docket No. 01-185 and in ET Docket No. 95-18; and Further Notice of Proposed Rulemaking in ET Docket No. 00-258, IB Docket No. 99-81, ET Docket No. 95-18 and FCC RM Docket Nos. 10024 and 9498

Subject: Comments of the Mobile Satellite Users Association

Dear Ms. Salas:

## INTRODUCTION

The Mobile Satellite Users Association ("MSUA") herein submits its Comments in response to the Commission's Notice of Proposed Rulemaking FCC 01-225 ("Notice"), adopted August 9, 2001, and to the Commission's Further Notice of Proposed Rulemaking FCC 01-224 ("Further Notice"), adopted August 9, 2001 in the above referenced dockets (collectively the "Rulemakings").

The Mobile Satellite Users Association ("MSUA") is a non-profit association dedicated to promoting the interests of the users of mobile satellite services ("MSS") worldwide. Its members include users of safety and specialized aeronautical, maritime and land mobile satellite services. It serves the interests of MSS users by fostering communications among and between them, suppliers of MSS equipment and services, operators of the MSS satellite systems and the various entities that may affect the future of the industry. In addition, MSUA is the only association that reviews, analyzes and reports on the activities, regulatory decisions and critical events of the MSS industry from a MSS user's perspective. Finally, MSUA provides a means of assembling MSS users' views on system and service concerns and conveying these concerns to the appropriate authorities. Accordingly, MSUA is an interested party in the above-referenced Dockets under the Commission's Rules.

In the Notice, the Federal Communications Commission ("FCC") seeks comments on whether it should permit mobile satellite service licensees in the 2 GHz and L-bands the flexibility to use those frequencies for ancillary terrestrial operations in conjunction with their satellite services. In addition, the Commission seeks comments on permitting terrestrial and other entities to use this MSS spectrum to provide a terrestrial service as an alternative or adjunct to the mobile satellite service.

In the companion Further Notice, the FCC seeks comments on opening up portions of the 2 GHz and L-bands for any operator to provide a terrestrial service that could either be offered in conjunction with MSS or as an alternative service. According to the Further Notice, this would most likely require band reallocation and licensing using the Commission's competitive bidding or auction procedures.

MSUA opposes, as contrary to the public interest, any action that would permit non-mobile satellite licensees to access critical spectrum allocated to MSS users. Any such action would harm safety services and would eliminate or delay competition in the deployment of advanced MSS services. With respect to the referenced pending applications by two MSS licensees (Motient and ICO), these companies propose to integrate terrestrial services with their networks, using assigned MSS frequencies to augment signals in areas where the satellite signal is attenuated, particularly in urban areas and inside buildings. While MSUA will not express definitive views on the two proposals at this time, it does raise specific issues that users believe should be properly addressed in this proceeding before final action is taken on these reallocations applications.

## PUBLIC NEED FOR MSS

As set forth in the Notice, two (2) MSS applicants, ICO Global Communications (Holdings) Ltd. and Motient Services Inc. and Mobile Satellite Ventures Subsidiary LLC, state that they have been unable to adequately build customer bases in densely populated areas. They assert, in this regard, that, as a result, the "promise of MSS has not been realized." As the subject proceedings arose in part from these assertions, MSUA is compelled to respond. The promise of MSS has been and continues to be realized by MSS users.

Despite well-publicized setbacks in recent years, the MSS industry remains vibrant and continues to offer a wide range of valuable services to users in the US and overseas. In the year 2000, MSUA estimates that the global MSS industry generated some US$1.4 billion in revenues. By the end of 2000, there were close to 750,000 mobile satellite terminals commissioned for operation around the globe.

Mobile satellite systems offer a wide variety of voice and data services, both circuit-switched and packet-switched. Mobile satellite communications are used daily for routine business operations as well as in emergencies on land, at sea and in the air. The role of mobile satellite communications in emergency situations cannot be over-emphasized. For example, a single MSS Land Earth Station in the U.S. responds to an average of 200 to 300 maritime emergency calls each year. In the wake of the terrorist attacks on the United States in September 2001, mobile satellite services are being used ever more extensively for coordination of aid, search and rescue, emergency services, media coverage of the disasters and morale and welfare communications.

Mobile satellite services also help more than 350,000 truckers keep in touch with their home offices. Other land mobile applications include assisting farmers to make their operations more efficient through precision farming, enabling geologists in the petroleum industry to better utilize their time in the field and giving families in remote villages the opportunity to communicate with loved ones that have moved away.

One of the largest single user segments of MSS services is that of governments, including local, state and federal, US and non-US, where mobile satellite communications provide needed links for operations being carried out in remote and rural areas often without terrestrial alternatives. In emergency situations, mobile satellite equipment is often the first means by which communications are re-established when terrestrial facilities are destroyed or incapacitated. Mobile satellite communications are used in law enforcement operations such as immigration, border patrols and drug interdiction. Mobile satellite communications are key to peacekeeping and refugee operations in Europe and Africa.

In the maritime arena, many of the more than 100,000 Inmarsat maritime terminals are fitted to ships to maintain compliance with the Global Maritime Distress and Safety Services ("GMDSS") regime. GMDSS was developed by the International Maritime Organization to provide mariners with a global communications and location network. The program has been under development since 1992. Since then, the IMO has produced guidelines identifying system requirements, including ship carriage requirements for radiocommunications equipment to meet the nine functions in the specific sea areas in which the vessel trades. While satellite communications are not required for all ships in all sea areas, they play a crucial role in the operation of the GMDSS. In particular, the Inmarsat system offers the ability for two-way communications, enabling ships in distress to alert the closest search and rescue center and to provide additional information to the rescuers concerning location and circumstances. While to date only Inmarsat equipment has been certified for the GMDSS, IMO has promulgated rules to certify other GMDSS providers.

In the air, satellite communications again play a crucial role in maintaining regularity and safety of life for aircraft in transit, particularly but not exclusively over ocean regions. Terrestrial communications do not extend across oceans, and in some areas of the world, do not exist over land masses. Accordingly, satellite communications may be the only link that pilots have when trouble arises. The majority of commercial airliners traversing the oceans are equipped with MSS terminals providing needed cockpit and other operational communications. So important are these functions that spectrum has been allocated internationally to aeronautical safety services (AMS(R)S), and these frequencies are included in the spectrum currently under consideration for ancillary applications. Aviation safety officials have already undertaken steps to include a variety of mobile satellite system services within the International Civil Aviation Organization (ICAO's) Standards and Recommended Practices (SARPs).

In brief, there is an urgent and critical public interest need for MSS services, and these are being well-served by the industry under the current rules and allocations. Any

reallocation to other services based on limited benefits or use is premature and unwarranted.

## PUBLIC INTEREST IN MSS

In the interest of fostering and growing the public services discussed above, MSUA is vitally concerned with preserving MSS's access to spectrum already allocated to it by the ITU and the FCC. As the FCC is well aware, efforts to achieve global frequency allocations for mobile satellite services extended over several decades. Beginning as early as the 1960s, the mobile satellite industry has worked diligently to obtain adequate spectrum internationally to bring the benefits of communication to areas where terrestrial communications are either not physically possible or are not economically viable. The MSS industry already shares its critical spectrum allocations with other applications and users to the extent that the Radio Regulations require. MSUA is opposed to permitting any non-MSS licensee access to frequency bands that have been allocated to MSS for critical services and where such access will make such services either more costly or less reliable and available.

Two MSS applicants, ICO and Motient, have observed that their mobile satellite communications services generally cannot adequately be maintained by users inside buildings and cannot be offered in certain areas where the handset's view of the satellite is obstructed (such as in so-called urban canyons and heavily-forested areas). Thus, they have requested more service flexibility than currently allowed under MSS allocation rules. While MSS users would benefit if seamless service were available that would permit users travelling from remote and rural areas to urban areas to maintain unimpeded communications, this should not be done if at the expense of the MSS services and MSS allocations in general.

MSUA users favor proposals, such as those of the applicants, that enhance the value and utility of MSS to users and the public here in the US as well as worldwide. Users would welcome coverage inside buildings and in urban centers as well as the availability of broadband data services. Proposals that enhance the commercial success of MSS may also serve the public indirectly by making the service more affordable to the ordinary citizen in rural and remote areas as well as at sea and in flight. However, these benefits to users cannot come at the expense of vital public services that rely heavily on MSS: safety of life at sea and in the air, US national defense and US law enforcement. Proposals to change spectrum utilization rules must not be allowed to detract from these public services.

## MSS CONCERNS

In addition to the general concerns regarding about spectrum allocation and utilization that are expressed above, MSUA raises the following specific issues that our users believe the FCC should address with the applicants. MSUA will be taking a more

definitive view of the applications and proposals on the Notice and Further Notice as these concerns are addressed.

**1. Competition Issues**

MSUA favors full, fair and open worldwide competition in the provision of MSS goods and services and urges the promulgation of regulations that foster such competition. Accordingly, we would urge the adoption of rules that treat all MSS licensees equally. In particular, in the event that the FCC sees fit to grant any applicant greater frequency flexibility, it should also grant other MSS licensees the same flexibility in the use of MSS spectrum, if technically feasible. Any other approach could have an anti-competitive impact and harm suppliers and users.

**2. Terrestrial Services**

MSUA believes that MSS does not compete with terrestrial services; it primarily serves to complement terrestrial services in geographical areas they cannot reach for technical or economic reasons. Thus, should the FCC determine that it is feasible to permit the added convenience of MSS to users in urban and densely populated areas that the Notices propose, it should ensure that it is limited to truly "ancillary" applications by MSS providers. Such ancillary terrestrial use of MSS spectrum must never become so extensive as to dwarf genuine MSS usage: "the tail wagging the dog".

**3. Safety Services**

The Notice proposals appear to encompass the full L-bands and 2 GHz bands allocated to MSS. In view of the importance that the world attaches to the maritime and aeronautical safety services, the FCC should continue to ensure the protection of bands allocated to the maritime and aeronautical safety services from harmful interference.

**4. Interference**

Finally, MSUA is concerned at the absence of definitive technical assessments of the ancillary terrestrial applications' potential for interference and/or reduction of MSS spectrum capacity. We believe the record on this is incomplete, and that the FCC should encourage proponents to provide appropriate studies to substantiate their claims of non-interference.

In conclusion, in considering proposals for greater flexibility with the use of MSS bands, care should be given to recognizing the benefits that supported the current allocations, and not to utilizing the MSS bands as a "course of least resistance" for terrestrial carriers interested in expansion opportunities. Service to rural areas, emergency services and the like – services the MSS was designed to provide – must not be placed in jeopardy simply to reduce opportunities for terrestrial "dial tone". Further, to the extent that "ancillary"

services are technically feasible, they should be considered to allow MSS to flourish and to ensure that all of the

benefits of MSS are made available to MSS users – many of which are now largely awarded to terrestrial users. Auctioning and other possible reallocation procedures would destroy MSS and make MSS unaffordable to those that need it most, and which often have no other alternative.

Sincerely,

Dr. Ahmad F Ghais
President